
Quick Start Guide to Install & Configure Accelerator for .NET

For Use with Microsoft SQL Server or IBM i DB2 Databases



Version V3 R2 M0  
7/23/2023

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# Overview

Surround’s Accelerator Development Solutions are a complete suite of Frameworks and Tools that empower developers to develop Faster, with Better results, and More functionality to deliver the software customers, employees, business partners, and vendors will love. The resulting systems allow for the seamless integration of .NET applications with various application and database servers to enhance user experience and productivity to drive greater growth and profit for the business.

# Prerequisites

## Visual Studio

Before you begin, you will need to have **Visual Studio 2012 or higher** installed on your system. Visual Studio 2019 or higher is recommended.

If you require a copy of Visual Studio, the Visual Studio Community Edition is free for individual developers, open-source projects, academic research, education, and small professional teams. Simply download the installer and follow the on-screen instructions for a complete install.

**Visual Studio Product Page:** <https://visualstudio.microsoft.com/>  
**VS 2019 Community Edition:** <https://visualstudio.microsoft.com/vs/community/>

## Demonstration Repository (Optional)

Accelerator is used to quickly develop applications using existing databases. You can start right off with your own database or, for evaluation and training purposes, use Surround’s free EasyBuy Cycles Demonstration Material.

The EasyBuy Cycles Demonstration Material provides everything you need to experience the benefits of building systems with Accelerator. Use the material to follow along with the demonstration videos and development tutorials.

**Git Repository Link:** <https://github.com/SurroundTechnologies/AcceleratorSolutionDemo_EasyBuyCycles>

**Full Repository Download:** <https://github.com/SurroundTechnologies/AcceleratorSolutionDemo_EasyBuyCycles/archive/refs/heads/main.zip>

## Access to a Database

This Quick Start Guide provides instructions for Microsoft SQL Server and IBM i DB2 Database servers. Accelerator supports development with many other databases as well. Please contact us at [support@surroundtech.com](mailto:support@surroundtech.com) if you have questions about other databases.

## Microsoft SQL Server or SQL Server Express Database

If you plan to use Accelerator to create an application that accesses a Microsoft SQL Server or SQL Server Express database, you will need network access to an installation of **SQL Server 2008 R2 or higher**. SQL Server 2019 or higher is recommended.

### Installing Microsoft SQL Server or SQL Server Express

If you require a copy of Microsoft SQL Server database to evaluate Accelerator, we recommend installing Microsoft SQL Server Express locally on your development PC.

**SQL Server Product Page:** <https://www.microsoft.com/en-us/sql-server/>  
**SQL Server Downloads:** <https://www.microsoft.com/en-us/sql-server/sql-server-downloads>

### EasyBuy Demonstration Database (Optional)

The following files are optional downloads if you wish to utilize Surround Technologies’ free EasyBuy Cycles demo database which will allow you to follow along with the demo videos and tutorials. The EasyBuy demonstration material provides everything you need to experience the benefits of building systems with Accelerator.

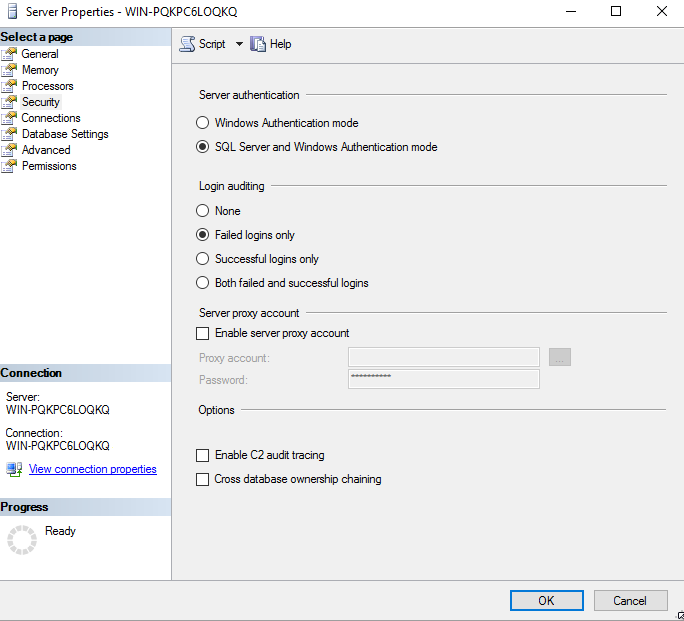
**Repository Folder:** \AcceleratorSolutionDemos\_EasyBuyCycles\Database Definition and Scripts

**2 database options:**  
**SQL Server – Modern** is suggested for developers looking to develop systems with more modern databases.  
**SQL Server – Legacy** is suggested for developers needing to develop a system using an older legacy-style database.

### Configuring Microsoft SQL Server for use with the EasyBuy Database

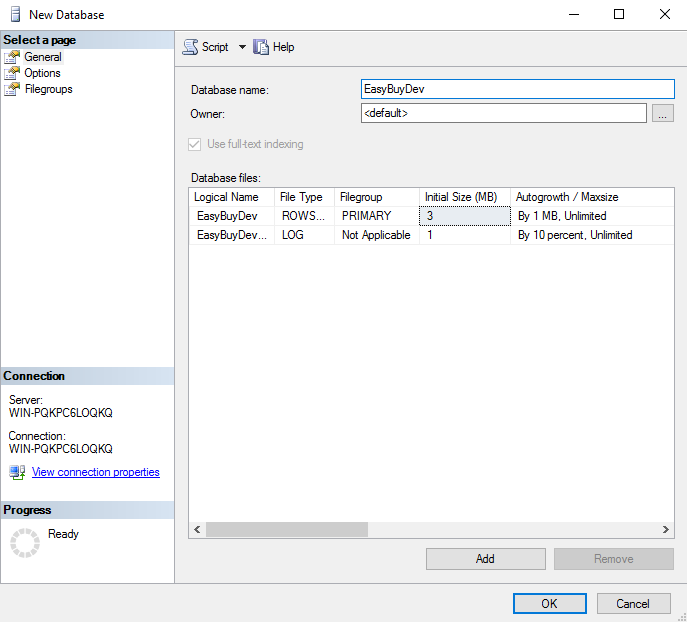
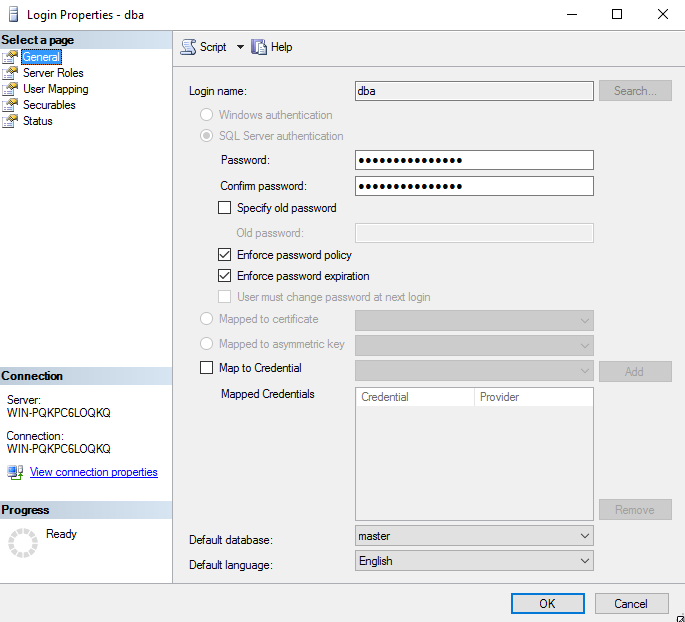
If you are using the Surround Technologies EasyBuy Database, you will need to create a user with the proper authorizations to create and maintain your database, as well as the initial sample database itself.

Open Microsoft SQL Server Management Studio and connect to your Database Engine. Right click on your Database Server in the Object Explorer and select Properties. Click on the Security page and make sure SQL Server and Windows Authentication mode is selected. Press OK.



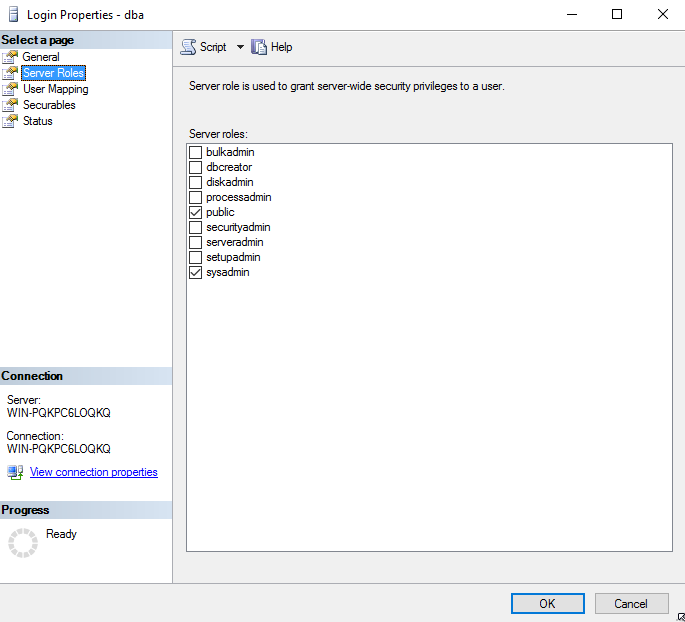
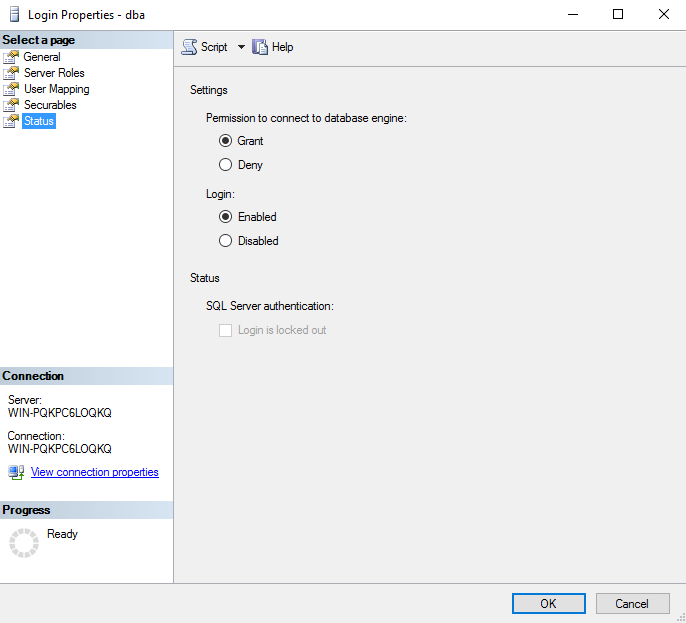
Next, create a new database by right clicking the Databases folder in the Object Explorer and selecting “New Database”. Name your new database “EasyBuyCyclesLegacy”. Press OK to save the database.

Next, expand the Security folder of your database connection, right-click on Logins and select New Login. Select a Login Name, select “SQL Server authentication” and specify a password. You may want to uncheck User must change password at next login.

Next, select the Server Roles page and grant the user “public” and “sysadmin” security privileges.

Lastly, select the Status page and confirm that the user has been Granted Permission to connect to the database engine, and that the login is Enabled. Click OK to finish creating the user.

The EasyBuyCyclesLegacy Database is now configured for use with Accelerator for .NET.

### Create the Database Tables and Data

There is a “SQL Server DDL EasyBuyCyclesLegacy Full DB.sql” and 5 other scripts in the “…\AcceleratorSolutionDemos\_EasyBuyCycles\Database Definition and Scripts\SQL Server - Legacy” repository folder downloaded in section [Demonstration Repository (Optional)](#_Demonstration_Repository_(Optional)).

In SQL Server Management Studio using the EasyBuyCyclesLegacy database, run the following scripts **in the sequence listed**:

1. SQL Server DDL EasyBuyCyclesLegacy Full DB.sql EasyBuy Cycles Database Schema
2. EasyBuyCycles\_YD1C.sql Customer Data
3. EasyBuyCycles\_YD1O.sql Order Data
4. EasyBuyCycles\_YD1P.sql Product Data
5. EasyBuyCycles\_YD1S.sql Shipping Address Data
6. EasyBuyCycles\_YD1I.sql Order Item Data

Open each file in SQL Server Management Studio and select “Execute” from the SQL Management Studio toolbar. The longer data scripts may take some time to complete, progress can be tracked at the bottom of the Microsoft SQL Server Management Studio screen.

## IBM i DB2 Database Server

If you plan to use Accelerator to create an application that accesses an IBM Power Systems IBM i DB2 database you will need network access to a system with **IBM i OS V6.1 or later**. IBM i OS V7.3 or higher is recommended.

**IBM i Product Page:** <https://www.ibm.com/it-infrastructure/power/os/ibm-i>

### Installing and Configuring the IBM i .NET Data Provider

There are many ways of accessing the IBM i integrated DB2 database. The following provides instructions for using the IBM i .NET Data Provider, a free solution included with IBM i Access Client Solutions. Please contact us at [support@surroundtech.com](mailto:support@surroundtech.com) if you have questions about DB2 Connect or other ways to access.

You will need an IBM ID and Password to access the downloads.

**IBM i Access Client Solutions Information:** <https://www.ibm.com/support/pages/ibm-i-access-client-solutions>  
**IBM i Access Client Solutions Download Page:** <https://www.ibm.com/resources/mrs/assets?source=swg-ia>  
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The free IBM i ACS .NET Data Provider gets installed through the “IBM i Access Client Solutions - Windows Application Package”.

**Windows Application Package Download:** <https://iwm.dhe.ibm.com/sdfdl/v2/regs2/sharee2/iacs-java/v1r1/Xa.2/Xb.Fjx4e5cja3gCAXSAOEU3QUtuUdWwMC0eBwGtxPmZYWw/Xc.iacs-java/v1r1/IBMiAccess_v1r1_WindowsAP_English.zip/Xd./Xf.lPr.D1vk/Xg.11751639/Xi.swg-ia/XY.regsrvs/XZ.gU663PwJUeK72n3fM-vNnTn3UFlncm3O/IBMiAccess_v1r1_WindowsAP_English.zip>

**Install IBM i Access Client Solutions –** This is a Java Application. You must have Java installed for it to work and the Installation itself is a bit different than a typical windows install. You must unzip it and go to the **Windows\_Application** folder, right click on **install\_acs\_64\_allusers.js** and open it using **Microsoft Windows Based Script Host**.

**Important:** If you have the previous IBM I Client Access version installed, it MUST be uninstalled first.

**Install ACS Windows Application Package –** You must unzip the downloaded file, go to the Image64a folder, and run setup.exe.

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Description automatically generated

Make sure the .NET Data Provider is selected and click the **Next** button. The Accelerator only requires that **Required Programs** and **.NET Data Provider** be installed. It is your preference if you wish to install the other options. Click Next to finalize the installation.

Click Install to complete the installation.

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### EasyBuy Demonstration Database (Optional)

The following files are optional downloads if you wish to utilize Surround Technologies’ free EasyBuy Cycles demo database which will allow you to follow along with the demo videos and tutorials. EasyBuy provides everything you need to experience the benefits of generating systems with Accelerator.

**Download Link:**   
To make setup and configuration simpler, we have created a save file that will take the heavy work out of any configuration. Simply download the zipped save file from:  
<https://github.com/SurroundTechnologies/AcceleratorSolutionDemo_EasyBuyCycles/blob/main/Database%20Definition%20and%20Scripts/DB2%20for%20i%20-%20Legacy/EasyBuyDB2SaveFile.zip>

Unzip the save file named easybuydev.savf.

On your IBM i, use the following command to create a new save file:

CRTSAVF FILE(EASYBUYDEV) TEXT('Easy Buy Demo Save File’)

FTP the easybuydev.savf file from your PC to your IBM i by opening a command prompt and issuing the following commands:

cd <the folder location of the file easybuydev.savf.>

ftp <Your IBM i IP Address>

<IBM i User ID>

<IBM i Password>

bin

Put easybuydev.savf easybuydev

On your IBM i, use the following command to restore the library in the save file:

RSTLIB SAVLIB(EASYBUYDEV) DEV(\*SAVF) SAVF(EASYBUYDEV)

The library EASYBUYDEV will now have the 5 EasyBuy files that are used in the Accelerator Generation Demo.

# Accelerator for .NET

## Installation

Locate the “Accelerator Environment Provisioned” email you received upon registering for the trial. Download the Accelerator for .NET that best suits your system, 32-bit for x86 systems or 64-bit for x64 systems. You will also need to download the included Generation Standards Zip File.

Extract the contents of the Generation Standards zip file, and then place the Accelerator for .NET folder contained in it within your Documents folder. It should look like the following:

Graphical user interface, text, application, email

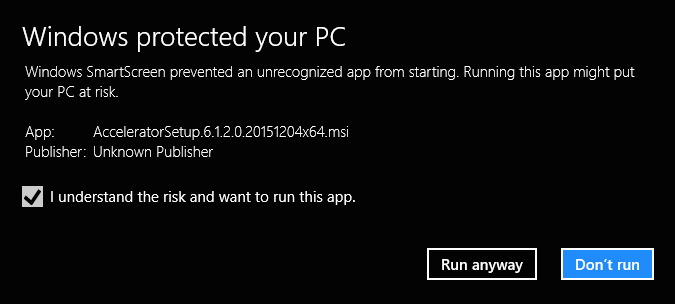
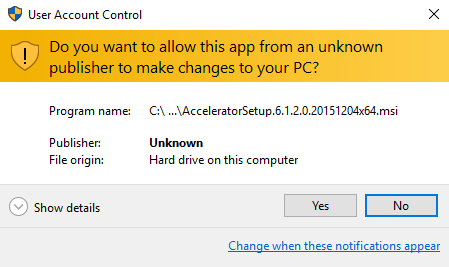
Description automatically generated

Run the Accelerator Setup installer to begin the installation of Accelerator for .NET. The on-screen instructions will quickly guide you through the install process including where to save your application files. If you are prompted with any Windows security warnings, allow access to the setup application to continue the install.

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Windows Security prompts may be displayed. Grant Permission to proceed with installation.

Once the install is complete, run the Accelerator launchpad from your desktop by double clicking the Accelerator icon that was created during the installation process.

## Configuration

Before you can begin creating your applications, you’ll need to configure the Accelerator to connect to the database you created earlier. To do this, run the Accelerator Launchpad from the Desktop and click Configuration from the Accelerator’s Launch Pad window.

Graphical user interface

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**Accelerator Generation Standards:** To make the configuration process simpler, your Generation Standards zip file contains preset standards configurations to get you started. Under the standards area, select the browse button “…” and navigate to Documents > Accelerator for .NET > Standards Configuration > EasyBuy Folder. For Microsoft SQL databases select the StandardsConfiguration\_MSSQL.xml file. For IBM users a DB2 standards xml file has been provided as well.

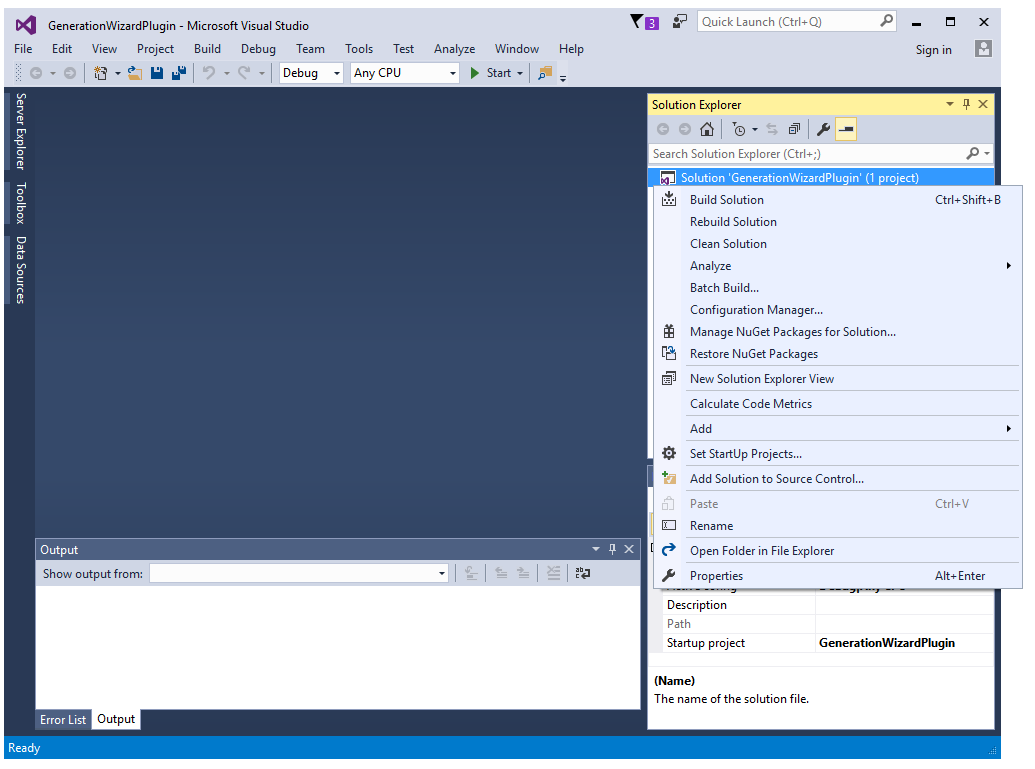
**Data Server Connection:** Next, in the Data Server Connection area, select your server type, E.g. MS SQL Server, Azure SQL, IBM i, IBM z. Enter the user and password for your Server. If the database is on your local machine use the instance name, typically the topmost level of the tree in SQL Server Management Studio, for the Address. If your server is located on a network, use the IP address of that server. Be sure to enter the Database you wish you use, e.g. EasyBuyDev, and click Test Connection to guarantee the specified location and credentials have the proper authorizations and can successfully connect to your SQL Server database.

**Accelerator Services Connection:** Lastly, enter your Accelerator username and password, found at the bottom of the “Accelerator Environment Provisioned” email. You will also need the Accelerator Address for connecting to your own personally provisioned environment.

Now that you’ve installed and configured the Accelerator, you’re ready to begin generating systems faster than before, with better results and more functionality. Thank you for choosing the Accelerator for .NET, and we hope you enjoy developing smarter.

## Generation Wizard Plugin

Some users may require rebuilding the Generation Tool prior to generation. To do this, navigate to your Documents > Accelerator for .NET > GenerationWizardPlugin folder and open the GenerationWizardPlugin.sln Solution using your copy of Visual Studio 2019. Right click on the GenerationWizardPlugin project in the Solution Explorer panel and select “Rebuild Solution”. Once the solution is rebuilt, simply exit Visual Studio. The Plugin is now ready to be used with the Generation Wizards.



## Accelerator Generation Standards

The Accelerator allows you to provide a plugin that tailors how code is generated based on your standards. If you choose to generate using our EasyBuy Database, it is recommended that you download and use the Accelerator Generation Standards.

This **AcceleratorGenerationStandards.zip** download is specific to each Accelerator version and is provided in your Accelerator Environment Provisioned email.